

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

81

1 1. (amended) An inkjet device comprising:  
2 at least one printhead arranged to eject ink drops  
3 in a spitting operation;  
4 a spittoon arranged to store the ejected ink; and  
5 a generally planar shelf mounted for rocking motion  
6 between:

7  
8 a first position for directly receiving  
9 and retaining the ejected ink from  
10 the printhead, and

11  
12 a second position for transferring the  
13 received ink to the spittoon by  
14 spilling the received ink from the  
15 shelf into the spittoon.

1 2. (amended) An inkjet device comprising:  
2 at least one printhead arranged to eject ink drops  
3 in a spitting operation;  
4 a spittoon arranged to store the ejected ink; and  
5 a temporary spittoon arranged to move between first  
6 and second positions, said temporary spittoon being ar-  
7 ranged in the first position so that the ink drops are  
8 ejected onto a surface of said temporary spittoon, and  
9 said temporary spittoon being further arranged to trans-  
10 fer the ink to the spittoon when in the second position;  
11 wherein the surface of the temporary spittoon is  
12 approximately 1 mm to 10 mm from the printhead when the  
13 temporary spittoon is in the first position.

A2 ✓  
1 4. (amended) A device according to claim 1, wherein:  
2 the shelf is substantially horizontal when in the  
3 first position.

1 5. (amended) An inkjet device comprising:  
2 at least one printhead arranged to eject ink drops  
3 in a spitting operation;  
4 a spittoon arranged to store the ejected ink; and  
5 a temporary spittoon arranged to move between first  
6 and second positions, said temporary spittoon being ar-  
7 ranged in the first position so that the ink drops are  
8 ejected onto a surface of said temporary spittoon, and  
9 said temporary spittoon being further arranged to trans-  
10 fer the ink to the spittoon when in the second position;  
11 wherein the temporary spittoon is mounted on a shut-  
12 tle, said shuttle being arranged to move the temporary  
13 spittoon between the first and second positions.

1 6. (amended) A device according to claim 5, wherein:  
2 the temporary spittoon is arranged to be oriented in  
3 a first orientation when in the first position and in a  
4 second orientation different from the first orientation  
5 when positioned in the second position, such that when  
6 positioned in the second position the temporary spittoon  
7 is arranged to transfer the ink from the spittoon surface  
8 by gravity.

AZ  
Cont  
Sub  
B1

1 7. (amended) A device according to claim 6, wherein:  
2 the temporary spittoon is rotatably mounted to the  
3 shuttle and arranged to pivot relative to the shuttle  
4 between the first and second orientations.

AZ  
Cont

1 8. (amended) A device according to claim 7, wherein:  
2 the temporary spittoon is arranged to rotate rela-  
3 tive to the shuttle under the action of one or more cam  
4 surfaces.

Az  
Cont

1 9. (amended) An inkjet device comprising:  
2 at least one printhead arranged to eject ink drops  
3 in a spitting operation;  
4 a spittoon arranged to store said ejected ink;  
5 a temporary spittoon arranged to move between first  
6 and second positions, said temporary spittoon being ar-  
7 ranged in the first position so that the ink drops are  
8 ejected onto a surface of the temporary spittoon, and  
9 said temporary spittoon being further arranged to trans-  
10 fer the ink to the spittoon when in the second position;  
11 and wherein:  
12 the surface of the temporary spittoon is substan-  
13 tially horizontal when the temporary spittoon is in the  
14 first position;  
15 the temporary spittoon is mounted on a shuttle, the  
16 shuttle being arranged to move the temporary spittoon  
17 between the first and second positions; and  
18 the temporary spittoon is arranged to be oriented in  
19 a first orientation when in the first position and in a  
20 second orientation different from the first orientation  
21 when positioned in the second position, such that when  
22 positioned in the second position the temporary spittoon  
23 is arranged to transfer the ink on the spittoon surface  
24 under gravity; and  
25 the temporary spittoon comprises a flexible material  
26 fixedly mounted to the shuttle, the temporary spittoon  
27 being arranged to bend or deform between the first and  
28 second orientations.

A3

1 14. (amended) An inkjet device comprising:  
2 at least one printhead arranged to eject ink drops  
3 in a spitting operation;  
4 a spittoon arranged to store the ejected ink;  
5 a temporary spittoon arranged to move between first  
6 and second positions, said temporary spittoon being ar-  
7 ranged in the first position so that the ink drops are  
8 ejected onto a surface of the temporary spittoon, and  
9 said temporary spittoon being further arranged to trans-  
10 fer the ink to the spittoon when in the second position;  
11 wherein the surface of the temporary spittoon is  
12 substantially horizontal when the temporary spittoon is  
13 in the first position; and  
14 wherein the temporary spittoon is mounted on a shut-  
15 tle, said shuttle being arranged to move the temporary  
16 spittoon between the first and second positions; and  
17 a printhead servicing element comprising a cap or a  
18 wiper arranged to be movable between a non-active posi-  
19 tion distant from the printhead and an active position  
20 adjacent to the printhead;  
21 wherein the movement of the temporary spittoon is  
22 linked to that of the servicing element so that the tem-  
23 porary spittoon is arranged to be in the first position  
24 when the servicing element is in the non-active position  
25 and to be in the second position when the servicing ele-  
26 ment is in active position.

16. (amended) A device according to claim 5:  
further comprising a plurality of pens;  
wherein in the first position the temporary spittoon  
is arranged so that ink drops ejected in spitting opera-  
tions by one or more of the plurality of pens are ejected  
onto a surface of the temporary spittoon.

18. (amended) A device according to claim 16, further  
comprising:  
one or more scrapers arranged to remove ink from the  
temporary spittoon surface as the temporary spittoon  
moves between the first and second positions.

19. (amended) A device according to claim 5, wherein:  
the device is arranged so that in the second posi-  
tion the temporary spittoon is located substantially in  
contact with the spittoon or ink stored therein, the  
temporary spittoon being adapted so that the ink on the  
temporary spittoon surface is able to flow from the tem-  
porary spittoon to the spittoon.

20. (amended) A device according to claim 5, wherein:  
the temporary spittoon comprises a porous body adap-  
ted to allow the ink on the temporary spittoon surface to  
flow through the temporary spittoon to the spittoon.

21. (amended) A device according to claim 5, wherein:  
the inkjet device is a printer.

ABG  
Ant

1 22. (amended) An inkjet printhead servicing assembly  
2 comprising:  
3 a spittoon arranged to store ink ejected by an ink-  
4 jet printhead in a spitting operation; and  
5 a spitting shelf rockable between:  
6  
7 a first position for directly receiving  
8 ink drops ejected by the printhead in  
9 a spitting operation, and  
10  
11 a second position for pouring the received  
12 ink off the shelf into the spittoon.

1 23. (amended) An inkjet device comprising:  
2 at least one print head arranged to eject ink drops  
3 in a spitting operation;  
4 a spittoon arranged to store the ejected ink; and  
5 a temporary ink receiver arranged and powered to  
6 move between:  
7  
8 a first position in relatively closer  
9 proximity to a nozzle plate of the  
10 printhead, to intercept ink with min-  
11 imal formation of aerosol; and  
12  
13 a second position relatively more distant  
14 from the nozzle plate to allow cap-  
15 ping or wiping of the nozzle plate.



24. (amended) An inkjet printhead servicing assembly comprising:

- a spitting surface;
- a cap assembly;
- a reciprocating shuttle arranged to move between first and second positions and to actuate the spitting surface and the cap assembly;

the servicing assembly being arranged so that:

- when the shuttle is in the first position the cap assembly is located distant to a nozzle plate of the printhead and the spitting surface is located in close proximity to the nozzle plate so that ink ejected from the nozzle plate during a spitting routine is ejected onto the spitting surface; and
- when the shuttle is in the second position the cap assembly substantially caps the nozzle plate and the spitting surface is located in a position such that the ink ejected onto the spitting surface is transferable under gravity to a permanent ink storage container.

174  
ant

1 25. (amended) A method of servicing an inkjet printhead  
2 with a servicing assembly; said servicing assembly com-  
3 prising a spittoon arranged to store ink ejected by said  
4 inkjet printhead in a spitting operation, and a generally  
5 planar spitting surface; said method comprising the steps  
6 of:

7 locating the spitting surface in a first position  
8 relatively closer to the printhead and generally horizon-  
9 tal so that drops ejected by the inkjet printhead in a  
10 spitting operation are ejected onto the spitting surface  
11 and generally are retained thereon;

12 translating the spitting surface to a second posi-  
13 tion relatively more remote from the printhead, allowing  
14 clearance for printhead wiping or capping, and at the  
15 second position inclining the generally planar spitting  
16 surface to discharge the retained into the spittoon.

1 26. (amended) A method of servicing an inkjet printhead  
2 with a servicing assembly; said servicing assembly com-  
3 prising a spittoon arranged to store ink ejected by said  
4 inkjet printhead in a spitting operation, and a spitting  
5 surface; said method comprising the steps of:

6 locating the spitting surface in a first position  
7 such that drops ejected by the inkjet printhead in a  
8 spitting operation are ejected onto the spitting surface;

9 moving the spitting surface to a second position  
10 such that the ejected drops may be transferred to the  
11 spittoon; and

12 capping or wiping the printhead when the spitting  
13 surface is in the second position.